

Award Category: Regional IPM Program

Nominee Name: Eco Apple Program

Nominee Title:

Nominee Affiliation: Red Tomato

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Nominator Name: Koplinka-Loehr, Carrie

Nominator Company: Northeastern IPM Center

Nominator Title: Director

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Supporting Document: SUBMITTED

Vita:

Improving economic benefits related to IPM adoption: Checked

Reducing potential human health risks: Checked

Minimizing adverse environmental effects: Checked

Brief Summary of Nominee's or Program's Accomplishments (500 words or less):

The Eco Apple program is an innovative partnership between farmers, scientists, and nonprofits. Begun in 2005, the program combines production of top quality fruit on family orchards in 7 northeastern states; advanced IPM protocol and certification; branding and marketing of regional fruit to supermarkets throughout the eastern US; education about IPM apple production for retail produce buyers and consumers; research on pest management; and a carefully-designed process for adding new growers and crops.

By integrating all these elements, Eco Apple successfully addresses key priorities of the IPM National Road Map. The learning community and network strengthen information-sharing between growers, consumers and researchers regional-wide; the protocol advances use of biological controls and least-toxic substances; market incentives, consumer outreach and careful protocol updates address the need to evaluate and improve cost-benefit of IPM programs. Long-term, Eco Apple contributes significantly to 1) improving economic benefits related to IPM adoption, 2) reducing potential human health risks, and 3) minimizing adverse environmental effects.

Eco Apple is co-founded and managed by Red Tomato, a nonprofit organization that helps family farmers by marketing their high-quality, locally-grown produce. RT develops new markets, branding and packaging, manages the logistics needed to ensure success in a supermarket environment, and educates trade buyers and consumers to the value of products grown using IPM.

Eco Apple was co-founded and the orchards are certified by the IPM Institute of North America, which developed and manages the production protocol, annual review and update of the Protocol and Quick Guide for on-farm implementation, and collection and audit of farm records.

Research partners include scientists at University of Massachusetts, Cornell University, University of Connecticut, and others. They conduct research, participate in monthly calls and annual meeting of all participants, and ensure protocol and production practices reflect current knowledge of pest pressures and ecological pest management.

The network of farmers are the heart of the program. They produce fantastic fruit, test and refine production practices, and advise production and marketing aspects of the program at every step. Eco Apple's innovative market development and cutting-edge IPM production practices are possible with funding from EPA Region I Strategic Agricultural Initiative Grant Program, USDA Natural Resources Conservation Service Conservation Innovation Grant Program, USDA Crops at Risk Program, Northeastern IPM Center and many private foundations and donors.

Accomplishments:

- Growth: from 6 orchards to 22; 425 acres to 1025, sales over \$7 million (nearly 300,000 cases) of certified fruit by 2010; (2011 sales not final at time of nomination.)
- Advanced IPM Protocols and Quick Guides, updated annually, publicly available;
- Marketing and Branding via: website w/ orchard profiles, apple varieties, IPM information and links; Eco Apple video; retail brochures, posters, promotional flyers; apple tastings in stores, schools; training for retail buyers; custom packaging, co-branded with orchard and Eco information.
- Certification, including annual farm reporting and audit, on-farm inspection every three years.
- Media: Wall Street Journal, American Fruit Grower, WBUR, Cape Cod Journal, and others
- Eco Peach program successfully launched in 2011.

Describe the goals of the program being nominated; why was the program conducted? What condition does this activity address? (250 words or less):

In 2005, a multi-state IPM Apple Working Group was convened by Red Tomato and IPM Institute of NA, including veteran apple growers, scientists and extension agents from UMass. and Cornell, and RT's sales, logistics and marketing staff. Their goal was to establish a market-based mechanism to provide economic rewards and incentives that would lead to more widespread adoption of advanced IPM practices for apples. One of the greatest obstacles to the widespread adoption of IPM methods by commercial produce growers is that while the benefits of ecological farming practices accrue to society as a whole, the costs and risks are borne by the growers themselves.

Eco Apple goals include:

- support growers using advanced IPM practices in their orchards through a peer network, certification, and coordinated sales & marketing;
- increase awareness of the benefits IPM fruit production among retail produce buyers;
- create a market position for IPM fruit and educate consumers about the meaning and benefits of IPM; and,
- increase sales of northeast fruit produced using advanced IPM on family farms.

Benefits of the program beyond economics have also emerged, including the value of a peer network as a resource for information and support; and the powerful ability to manage supply and logistics cooperatively among growers in the network. As a result Eco Apple has been able to maintain key accounts, add growers, and push the production standards higher, all while bringing top quality fruit to market.

Describe the level of integration across pests, systems and/or disciplines that was involved. (250 words or less):

Development of the Eco Apple program has involved extensive collaboration across disciplines, states, crops, and organizations. Development of the protocols involves scientists from multiple institutions, addressing a full range of pests and diseases that affect northeast apples, as well as storage and post-harvest issues, with IPM Institute providing extensive coordination and management. Coordination of sales and logistics by Red Tomato involves partnerships with trucking companies, retail produce buyers, distributors, and trade staff. The marketing program involves marketing professionals from Red Tomato, consultants, and retail marketing staff, as well as extensive work with art director, designer and packaging suppliers. Reporting, auditing and certification processes are coordinated by the IPM Institute and involve independent scouts and inspectors.

Every part of the program involves deep commitment and partnership from the 22 growers who produce the Eco fruit—from 7 states, ranging in size from under 10 acres to much larger, with both wholesale and direct markets, all family-owned farms + one preservation land trust. The success of Eco Apple is directly built on the integrated, collaborative nature of the whole program.

Describe the team building process; how did the program being nominated get partners involved?

Education and awareness are essential in an IPM program. (250 words or less):

Eco Apple is a true collaboration, launched together by Red Tomato and the IPM Institute of North America. The advisory team for the project now includes 22 participating growers from 7 northeastern states, scientists from U Mass, Cornell, Penn State, University of CT, Rutgers, UWV, and the IPM Institute of North America.

An important part of the Eco Apple program is an annual review of the protocol, working closely with a group of scientists who are researching new pest management strategies and looking for alternatives that protect health and environment. Changes in climate, pest resistance, and apple varieties are considered as part of the review, along with current pest management research and changing regulations. All growers participate in the review and updates. The Eco Apple advisory group also recommends priorities for further research and helps identify funding & support for research.

Advisors and growers convene monthly by conference call and meet in person annually to review the protocol, discuss concerns and ideas for the future, and hear presentations from researchers and guest speakers. Red Tomato staff and growers are on the phone constantly during apple season. RT and IPM Institute staff, independent auditors and researchers all visit the orchards during the year. This frequent contact, collaboration to solve problems, and familiarity with everyone's contribution have resulted in a strong sense of teamwork and commitment. Growers consistently make difficult decisions about the protocol, marketing program and supply to strengthen the program overall.

What outcome describes the greatest success of the program?:

Along with successful sales and growth in acres and orchards participating, a few things stand out as notable accomplishments.

*** Brand Identity and Eco position in key retail markets**

Thanks to a talented graphic designer and brand team at Red Tomato, and an award-winning illustrator willing to exchange artwork for fruit, Eco Apple has a strong brand identity on signs, banners, brochures and custom packaging which highlights the story of each orchard and explains IPM in simple language. It takes tremendous coordination to ensure that all of the fruit sold in this packaging is identified directly to the farm that produced it. The outcome has been the embrace of the program by retailers and consumers as noted above.

*** Organophosphates steadily phased out of program**

Eco Apple producers have worked steadily since the start of the program to eliminate the use of the most toxic materials, including organophosphates (OPs). The Eco Apple protocol prohibits all use of OPs on the fruit itself. Since 2008, only one specific OP, chlorpyrifos, is allowed in restricted use for a specific pest, early in the year, to tree trunks only, and only as a last resort. In 2010 and 2011, growers made a special effort to produce a spectacular crop grown 100% without organophosphates. This has coincided with the release of new research on health concerns with OPs, especially for children, and has been an important benefit of the program for retailers and consumers.

Provide evidence of change in knowledge, behavior or condition as a result of the program/individual. (250 words or less):

In 2005, there were six certified orchards, with 475 total acres. In 2011, the program includes 22 orchards and 1025 acres. From 2005 through 2010, over \$7 million dollars and nearly 300,000 cases of certified Eco Apple fruit was sold. Sales for 2011 are on track to add nearly another million dollars. In 2010, the program was expanded to include stone fruit and an Eco Peach marketing program was launched in 2011.

One of the most significant indications of progress is the promotion of Eco Apple fruit in one of the largest grocery chains served by the program. Through Red Tomato's work developing a strong relationship with the chain's producer buyers and management team, providing training for buyers, tours of orchards, and supporting their marketing program with photos, signage, and links to the Red Tomato website, farm profiles, and video of the Eco Apple program, this chain is now featuring Eco Apple as their primary regional apple during the fall season, and has developed their own marketing program to promote the benefits of the IPM practices and orchards. It has taken a tremendous amount of coordination, and education of retail buyers over a period of years to reach this point.

The Eco Apple program is also a model to others in agriculture. Six growers and 450 acres in the Midwest are now following the Eco Apple protocol and looking towards this model as a way of securing markets for their apples.

Who or what should receive the most credit for the success of this program? (250 words or less):

Eco Apple is led by Michael Rozyne, of Red Tomato and Tom Green of the IPM Institute with significant support from Susan Futrell (RT), Peter Werts (IPM Institute) and Dan Cooley (UMass.). They are supported by staff at Red Tomato (Angel Mendez, Laura Edwards-Orr, Betty MacKenzie, Lesley Sykes); and by graphic designer and packaging manager Diane Stalford; by scientists at numerous institutions, and most importantly, by the network of participating growers, led by founding growers including John Lyman, Barney Hodges, Aaron and Dana Clark, and their peers at Alyson's Orchard, Truncali Orchards, Scott Farm, and all of the other participating growers.

Retail partners who have supported the program and recognized the value of IPM-produced fruit for they and their customers include Whole Foods, Donelan's and other independent grocers throughout the Northeast.

The program would not be possible without the funding provided by EPA Region 1, NE IPM Center, USDA Crops At Risk program, USDA/NRCS Conservation Innovation Grants program, and numerous private supporters and foundations.

If selected, suggested Citation for Award Certificate (40 words or less):

For their visionary, dedicated, collaborative effort to create, sustain, and expand a place in the market for Northeast apple growers who are leaders in the practice of advanced Integrated Pest Management and stewards of their land and communities.